

Maths - Year 2

Pattern and Algebra 3: Exploring equivalence—introducing empty box notation

Key Vocabulary

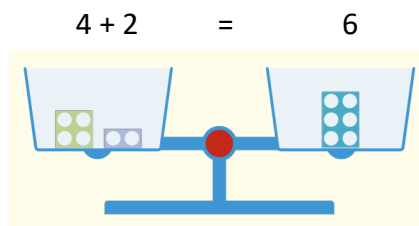
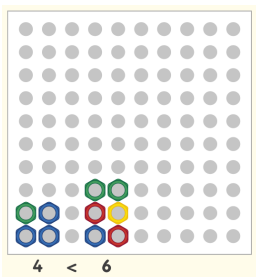
Balances	The same in number or amount.
Equals	The same in number or amount.
Number	One or more symbols to represent an amount.
Adjust	To make a small change to something.
Represent	Illustrate a method or calculation.

Mathematical Skills

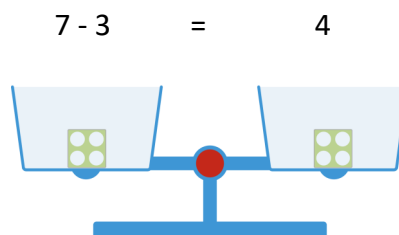
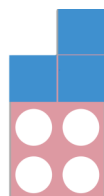
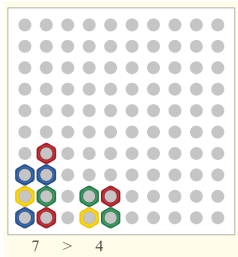
- Compare two different initial amounts (bigger/smaller, more/less) and then make adjustments to change them into equivalent amounts.
- Show equivalent amounts using Numicon shapes and number rods in the Numicon pan balance.
- Complete adding and subtracting sentences that have missing numbers.
- Devise equivalent adding and subtracting sentences within their working range e.g. $3 + 3 = 9 - 3$.

Mathematical Methods

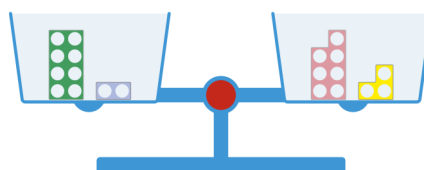
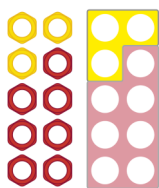
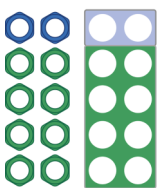
- Comparing groups of objects and adjusting by adding to make them equal.



- Comparing groups of objects and adjusting by subtracting to make them equal.



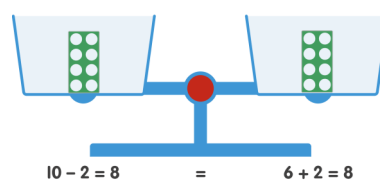
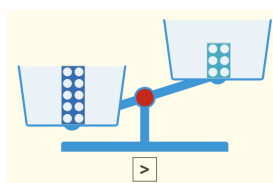
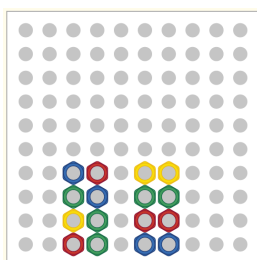
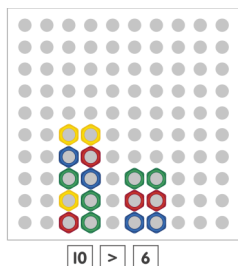
- Finding equivalent adding facts for 10 e.g. $8 + 2 = 10$ and $7 + 3 = 10$.



- How many are missing? Introducing empty box notation e.g. $5 + \square = 9$

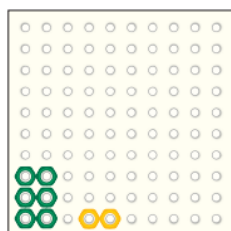
- Finding solutions to 'missing number' problems e.g. 'I have two Numicon shapes in my bag. Together they have a total of 10. One of them is a 3-shape. What is the other shape?

- Comparing groups and adjusting by adding and subtracting to make them equal.



Can you..?

- Can you move some pegs on this board so that both numbers are equal? Can you write a balancing number sentence to show this?



- Can you fill in these boxes to write some balancing numbers sentences?

$$4 + 3 = \square + \square$$

$$\square + \square = 4 + 3$$

$$4 + 3 = \square - \square$$

$$\square - \square = 4 + 3$$